



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

PD

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
| 08/849,686 | 08/21/97 | DEGGERDAL | A 08269/003001 |

HM12/0106

JANIS K FRASER
FISH & RICHARDSON
225 FRANKLIN STREET
BOSTON MA 02110-2804

EXAMINER

OWENS JR, H

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1623 | 15 |

DATE MAILED: 01/06/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/849,686

Applicant(s)
Deggerdal et al.

Examiner
Howard Owens

Group Art Unit
1623



☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-24 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☒ Claim(s) 22-24 is/are allowed.

☒ Claim(s) 1-21 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit 1623

Response to Arguments

5 The following is in response to the amendment filed 10/12/99:

An action on the merits of claims 1-24 is contained herein below.

10 Objection to the specification is maintained.

35 USC 112(2) Rejection

15 As the instant claims have not been amended to remedy the rejection of claims 13 and 19-21 set forth in the office action dated 5/12/99, the rejection of the claims is maintained.

20 **35 USC 102 Rejection**

The rejection of claims 1, 2 and 14 are under 35 U.S.C. 102(b) is maintained for the reasons of record.

25 As noted by applicant inherency can only be established if it is recognized by persons of skill in the art that the missing descriptive matter is present in the reference.

As recited from the previous office action, the Pharmacia Catalog
30 discloses oligo(dT) Cellulose (Product Code No. 27-5543-01) for the isolating of mRNA from a cell lysate which can certainly contain any conventional detergent. Oligo(dT) Cellulose is certainly an organic support which can bind mRNA in the presence of detergents. Furthermore, the material can be washed and the
35 nucleic acid eluted with heat which simply denatures the double-stranded nucleic acid. One of skill in the art would clearly recognize that clearly recognize the common use of detergents within the art of purification of nucleic acids; moreover, that the Pharmacia product could be used in the absence of a

Art Unit 1623

chaotropic agent, barring evidence to the contrary, which has not been presented by applicant.

35 USC 103 Rejections

5 The rejection of claims 1 - 24 under 35 U.S.C. 103(a) as being unpatentable over as being unpatentable over Reardon et al. (4,997,932) has been withdrawn.

10 Applicant's arguments filed 10/12/99 in response to the rejection of claims 1-12 and 14-18 under 35 U.S.C. 103(a) as being unpatentable over the 1994 Pharmacia Biotechnology Products Catalog., have been fully considered but they are not persuasive. The rejection of claims 1-12 and 14-18 under 35 U.S.C. 103(a) is
15 maintained for the reasons set forth below.

Applicant's claim that the targeting of the Pharmacia product is limited to mRNA tails is countered by the inclusion of "fractionization of oligonucleotides" apart from mRNA isolation
20 set forth in the Pharmacia catalog clearly indicating that nucleic acids are within the scope of the invention.

With regards to the reference suggesting all of the limitations specifically the presence of a detergent and in the absence of a
25 chaotropic agent, as cited previously "The Pharmacia Catalog discloses Oligo(dT) Cellulose which is an organic support which can bind nucleic acids in the presence of a detergent, buffers, salt, and chelating agents, then elute said nucleic acid upon heating". There is no evidence that one of skill in the art could
30 not use the claimed Pharmacia invention in the absence of chaotropic agents. One of the facets of determining obviousness

Art Unit 1623

is not only determining the scope and contents of the prior art,
but resolving the level of ordinary skill in the pertinent art.

5 Given this, one of skill in the art would clearly recognize the
common use of detergents within the art of purification of
nucleic acids.

10 Claims 22-24 appear to be allowable.

15

20

25

30

35

40

5

ENDING

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Howard Owens whose telephone number is (703) 306-4538 . The examiner can normally be reached on Mon.-Fri. from 8:30 a.m. to 5 p.m.

10

If attempts to reach the examiner by telephone are unsuccessful, the Primary Examiner signing this action, James O. Wilson can be reached on (703) 308-4624 . The fax phone number for this Group is (703) 308-4556.

15

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

Howard Owens

Group 1623

20

Gary L. Kunz
GARY L. KUNZ
PRIMARY EXAMINER
GROUP 1200